Index of Claims



Application/Control No.

10/757,267 Examiner

Date

Jessica T. Stultz

Applicant(s)/Patent under Reexamination

KUMAR ET AL.

Art Unit

2873

| <b>√</b> | Rejected | - |
|----------|----------|---|
| H        | Allowed  |   |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

Claim

| N | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

|               |                            |          | _  |  |              |  | 1        |  |  |          |  |  |  |  |  |
|---------------|----------------------------|----------|--|--|--------------|--|----------|--|--|----------|--|--|--|--|--|
| Cla           | im                         | Date     |  |  |              |  |          |  |  |          |  |  |  |  |  |
| Final         | _                          | 20/9/2   |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 1                          | 1        |  |  |              | -  |          | -  |  | $\vdash$ |  |  |  |  |  |
|               | 2                          | T        |  |  |              | -  |          |  |  |          |  |  |  |  |  |
|               | 3                          |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 1<br>2<br>3<br>4<br>5      |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 5                          |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 6                          | Ш        | L.   |  |              | _  | _        |  |  |          |  |  |  |  |  |
|               | 6<br>7<br>8                | Ш        |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 8                          | Ц.       |  | <u> </u>   |              |  | _        |  |  | Ш        |  |  |  |  |  |
|               | 9                          | 1        | _  | <u> </u>   | H            | _  |          | $\vdash$   |  | Ш        |  |  |  |  |  |
|               | 10<br>11                   | 1        | -  | _  |              |  |          |  |  | Н        |  |  |  |  |  |
|               | 12                         | $\vdash$ |  |  | -            | -  |          |  |  | $\vdash$ |  |  |  |  |  |
| -             | 12<br>13<br>14<br>15<br>16 | -/       | -  | <del> </del>                                     | $\vdash$     | <del> </del>                                     |          | $\vdash$   | -  | $\vdash$ |  |  |  |  |  |
| $\vdash$      | 14                         | +t       |  | <del>                                     </del> | -            | <del>                                     </del> | _        |  |  |          |  |  |  |  |  |
|               | 15                         | +        | -  | $\vdash$   | $\vdash$     | _  | $\vdash$ |  |  | Н        |  |  |  |  |  |
|               | 16                         | 1        | H  | _  | $\vdash$     | М  | -        |  |  |          |  |  |  |  |  |
| <u> </u>      | 17                         | H        |  | _  | <b></b>      |  |          |  |  |          |  |  |  |  |  |
|               | 18                         | 1        |  |  |              |  |          |  | -  |          |  |  |  |  |  |
|               | 18<br>19                   | 1        |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 20                         |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 21<br>22                   |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 22                         |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
| <u> </u>      | 23<br>24                   | L        |  |  | _            |  | _        |  | L.   |          |  |  |  |  |  |
|               | 24                         | L        |  | <u> </u>   | _            |  | _        | _  |  |          |  |  |  |  |  |
| <u> </u>      | 25                         | 1        | <u> </u>   | <u> </u>   | <u> </u>     | <u> </u>   | <u> </u> | <u> </u>   | <u> </u>   |          |  |  |  |  |  |
| <u> </u>      | 26<br>27                   | ₩        | _  | _  | <u> </u>     | <u> </u>   |          | _  | <u> </u>   |          |  |  |  |  |  |
|               | 27                         | ₩        | _  | -  | ┝            | H  | _        | _  | $\vdash$   | -        |  |  |  |  |  |
|               | 28<br>29                   | Н        |  | -  | -            | <u> </u>   |          | _  | $\vdash$   |          |  |  |  |  |  |
| <del></del>   | 30                         | H        | ├  | $\vdash$   | ⊢            | ├  | -        | ├─   | -  |          |  |  |  |  |  |
|               | 31                         | ╁        | ┝  |  |              | -  | _        |  | $\vdash$   |          |  |  |  |  |  |
| <b></b>       | 32                         | H        | Н  | $\vdash$   | $\vdash$     | H  |          | H  | H  | H        |  |  |  |  |  |
| $\vdash$      | 33                         | 1        | -  | $\vdash$   | $\vdash$     | $\vdash$   | $\vdash$ | <u> </u>   | $\vdash$   | $\vdash$ |  |  |  |  |  |
| <u> </u>      | 34                         | N        | Г  |  | Г            | Г  |          | Т  |  | $\Box$   |  |  |  |  |  |
|               | 35                         | T        |  |  | 1            | Г  |          |  | Ι.   |          |  |  |  |  |  |
|               | 36                         |          |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 37                         | $\prod$  |  |  |              |  |          |  |  |          |  |  |  |  |  |
|               | 38                         | $\prod$  |  |  | 匚            |  |          | 匚  |  |          |  |  |  |  |  |
| $oxed{oxed}$  | 39                         | Щ.       | _  | _  | L            | <u>L</u>   |          | <u> </u>   | Ш  | Ш        |  |  |  |  |  |
| <u> </u>      | 40                         | 1        | <u> </u>   | <u> </u>   | <u> </u>     | <u> </u>   | _        | <u> </u>   | Ľ  | Ш        |  |  |  |  |  |
| $\vdash$      | 41                         | ╙        | $\vdash$   | <u> </u>   | $\vdash$     | <u> </u>   | _        | $\vdash$   | <u> </u>   | Щ        |  |  |  |  |  |
| <del>  </del> | 42                         | ⊬        | <u> </u>   | $\vdash$   | <u> </u>     | <u> </u>   | _        | <u> </u>   | $\vdash$   | Н        |  |  |  |  |  |
| <u> </u>      | 43<br>44                   | H        | $\vdash$   | $\vdash$   | ├-           | $\vdash$   | H        | $\vdash$   | <u> </u>   | Н        |  |  |  |  |  |
| $\vdash$      | 45                         | #        | -  | ├-   | $\vdash$     | Η.   | $\vdash$ | $\vdash$   | <del> </del>                                     | Н        |  |  |  |  |  |
| <u> </u>      | 45                         | +        | -  | <del>                                     </del> | ⊢            | $\vdash$   | -        | ┢  | $\vdash$   | Н        |  |  |  |  |  |
| $\vdash$      | 47                         | ╫        | $\vdash$   | $\vdash$   | ┢            | $\vdash$   | $\vdash$ | $\vdash$   | -  |          |  |  |  |  |  |
| <u> </u>      | 48                         | +        | $\vdash$   | <del> </del>                                     | -            | $\vdash$   | $\vdash$ | <del>                                     </del> | $\vdash$   | Н        |  |  |  |  |  |
| $\vdash$      | 49                         | H        | <del>                                     </del> | $\vdash$   | <del> </del> | -  | ┢        | ┢╌   | <del> </del>                                     | Н        |  |  |  |  |  |
|               | 50                         | Į,       | $\vdash$   | <del>                                     </del> | _            | -  | $\vdash$ | $\vdash$   | <del>                                     </del> | Н        |  |  |  |  |  |

| $\overline{}$ | $\overline{}$  | _      |  |              |  |          |          |          |            | _  |     |       |          | _                |              |          |          |          |          | _        | _        |   |
|---------------|----------------|--------|--|--------------|--|----------|----------|----------|------------|--|-----|-------|----------|------------------|--------------|----------|----------|----------|----------|----------|----------|---|
| בוום          | Original       | 20/9/2 |  |              |  |          |          |          |            |  |     | Final | Original | 20/9/2           |              |          |          |          |          |          |          |   |
|               | 4              | 1      | $\vdash$   |              | $\vdash$   |          |          |          |            | <del> -</del>                                    |     |       | E4       | N                | $\vdash$     | $\vdash$ | _        | $\vdash$ | Н        |          | $\dashv$ |   |
|               | 1              | 7      | $\vdash$   | $\vdash$     | -  |          | Н        |          | _          |  |     |       | 51<br>52 | Z                | $\vdash$     |          |          |          | $\vdash$ |          | $\dashv$ |   |
| _             | 2              | ⊬      | _  |              | <u> </u>   |          | Н        |          | _          | <u> </u>   |     |       | 52       | 4                | -            |          |          |          | Н        |          | $\dashv$ | _ |
| _             | 3              | Ш      | · ·  |              | _  | _        |          | _        |            |  |     |       | 53       | Ц                | _            |          |          |          |          |          |          |   |
|               | 4              | Ц      |  | _            | _  |          |          | _        |            | _  |     |       | 54       | Ц                | $oxed{oxed}$ |          |          |          |          |          |          |   |
|               | 5              | Щ      |  |              |  |          |          |          |            | _  |     |       | 54<br>55 | Ц                |              |          |          |          |          |          |          |   |
|               | 5<br>6         | Ш      |  |              |  |          |          |          |            |  |     |       | 56       |                  |              |          |          |          |          |          |          |   |
|               | 7              |        |  |              |  |          |          |          |            |  |     |       | 57       |                  |              |          |          |          |          |          |          |   |
|               | 8              |        |  |              |  |          |          |          |            |  |     |       | 58       |                  |              |          |          |          |          |          |          |   |
|               | 8 9            | T      |  |              |  |          |          |          |            |  | ] [ |       | 58<br>59 |                  |              |          |          |          |          |          |          |   |
|               | 10             | ┑      |  |              |  |          |          |          |            |  | ) ( |       | 60       | П                |              |          |          |          |          |          |          |   |
|               | 11<br>12       |        |  |              | П  |          |          |          |            |  | ÌÌ  |       | 61       | П                |              |          |          |          |          |          |          |   |
|               | 12             | П      |  |              |  |          |          |          |            |  | ÌÌ  |       | 62<br>63 | П                |              |          |          |          |          |          |          |   |
|               | 13<br>14       | $\Box$ |  |              | Г  |          |          |          |            |  | 1   |       | 63       | П                |              |          |          |          |          |          |          |   |
|               | 14             | П      |  |              |  |          |          |          |            |  |     |       | 64       | Ħ                |              |          |          |          |          |          |          |   |
|               | 15             | П      |  |              | Г  |          |          |          |            |  | 1   |       | 65       | Ħ                |              |          |          |          |          |          |          |   |
|               | 16             | $\Box$ |  |              |  |          |          |          |            |  |     |       | 66       | H                |              |          |          |          |          |          |          |   |
|               | 15<br>16<br>17 | 1      |  |              | _  |          |          |          |            |  |     |       | 67       | Ħ                |              |          |          |          |          |          |          |   |
| _             | 18             | H      | <del>                                     </del> | _            | <del>                                     </del> |          | -        |          | -          | <u> </u>   |     |       | 68       | H                | $\vdash$     |          |          |          |          |          |          | _ |
| _             | 19             | Н      | -  | _            |  | _        | _        |          | _          | _  |     |       | 69       | Н                | $\vdash$     | _        |          | _        |          |          |          | _ |
|               | 20             | H      | -  |              | -  | $\vdash$ | -        |          |            |  | l   |       | 70       | H                | H            |          |          | -        | -        | -        | -        |   |
|               | 21             | Н      | $\vdash$   | <u> </u>     | -  | -        |          |          |            |  | i   |       | 71       | H                | ╁╌           |          | -        | -        | _        |          |          | _ |
| $\neg$        | 22             | Н      |  | $\vdash$     | $\vdash$   |          | $\vdash$ | _        |            |  |     |       | 72       | 1                | ╁─╴          | $\vdash$ |          | _        | _        | -        | $\dashv$ | _ |
| $\dashv$      | 22<br>23       | ╫      | $\vdash$   | H            | $\vdash$   |          |          |          | _          |  | l   |       | 73       | 1                | ╁            | -        |          |          |          |          |          | - |
|               | 24             | Н      | -  | $\vdash$     |  | -        |          | _        | ┝          |  |     |       | 74       | H                | †            | -        |          |          |          |          |          |   |
| _             | 24<br>25       | H      | -  | <del> </del> | $\vdash$   |          |          | _        | $\vdash$   | -  |     |       | 74<br>75 | Н                | $\vdash$     |          |          | _        |          |          | $\dashv$ |   |
| $\neg$        | 26             | ╫╴     | -  | $\vdash$     | -  |          | -        | _        | $\vdash$   |  |     |       | 76       | Н                | $\vdash$     |          | $\vdash$ | -        | _        |          | -        |   |
|               | 27             | ╫╴     |  | <u> </u>     |  | -        |          | -        | $\vdash$   |  | 1   |       | 77       | H                | 1            |          |          |          | -        |          |          |   |
|               | 28             | Н      | $\vdash$   | <u> </u>     | H  |          |          | _        | $\vdash$   |  |     |       | 78       | H                | +            | -        | _        |          | $\vdash$ | -        |          |   |
| $\neg$        | 29             | Н      | $\vdash$   |              | $\vdash$   | _        |          | _        |            |  |     |       | 79       | Н                | ╁            | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |          | $\dashv$ | _ |
|               | 30             | Н      | ┝  | $\vdash$     | ┢╾   | _        | _        |          | ┝          | _  |     |       | 80       | Н                | $\vdash$     | $\vdash$ | $\vdash$ | -        |          | -        | -        |   |
| -             | 31             | ╫      | ├  |              |  |          | _        |          | _          | -  |     |       | 81       | Н                | ╁            |          | _        |          | $\vdash$ |          |          | _ |
|               | 32             | H      | ┢  | _            | ┢  |          |          | _        | $\vdash$   | -  |     |       | 92       | H                | ├            | -        |          | -        |          |          |          |   |
| $\dashv$      | 32<br>33       | 1      | -  | ⊢            | ├  | _        | -        | _        | ┝          | -  |     |       | 82<br>83 | Н                | ╁            | -        | -        | -        |          |          | _        |   |
|               | 34             | Ň      | ⊢  |              | ⊢  | _        |          | _        | ⊢          | ⊢  |     |       | 84       | ╁                | ⊢            | _        | $\vdash$ | -        | -        |          | -        | _ |
|               | 35             | H      | ⊢  |              | -  | -        | _        |          |            |  |     |       | 04       | H                | ├            |          |          | -        |          |          |          |   |
| -             | 35             | H      | $\vdash$   | <u> </u>     | ⊢  | -        | H        |          | -          | $\vdash$   |     |       | 85<br>86 | H                | ₩            | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ |          | -        |   |
| -             | 36<br>37       | H      | $\vdash$   | <del> </del> | $\vdash$   | -        |          | <u> </u> | <u> </u>   | -  |     |       | 87       | ${\sf H}$        | $\vdash$     | $\vdash$ | -        | $\vdash$ | $\vdash$ |          |          |   |
| -             | 30             | ⊬      |  | ├—           | $\vdash$   | $\vdash$ | $\vdash$ | ├        | ├          |  |     |       | 0/       | ${oldsymbol{H}}$ | ╁            | $\vdash$ | -        | $\vdash$ | -        | $\vdash$ | $\dashv$ | _ |
| $\dashv$      | 38             | ₩      | $\vdash$   | $\vdash$     | ├  | $\vdash$ | $\vdash$ | <u> </u> | ⊢          | -  |     |       | 88       | Н                | ┼            |          | $\vdash$ | $\vdash$ | $\vdash$ | -        | -        | _ |
| -             | 39             | ╫╴     | ├  | $\vdash$     | $\vdash$   | -        |          | <u> </u> | $\vdash$   | -  |     |       | 89       | Н                | ₩            | $\vdash$ | -        | -        | $\vdash$ |          |          | _ |
| -             | 40             | +      | -  | <u> </u>     | ⊢  | -        | H        | <u> </u> | <u> </u>   |  |     |       | 90       | Н                | $\vdash$     | H        | $\vdash$ | H        | $\vdash$ | H        |          |   |
| $\dashv$      | 41<br>42       | ₩      | $\vdash$   | $\vdash$     | $\vdash$   | -        | $\vdash$ | <u> </u> | $\vdash$   |  |     |       | 91<br>92 | Н                | $\vdash$     | $\vdash$ |          |          |          |          | $\dashv$ | _ |
|               |                | Η-     | -  | <del> </del> | ⊢-   | -        | $\vdash$ | <u> </u> | <u> </u>   |  |     |       |          | Н                | $\vdash$     | <u> </u> | -        | -        | <u> </u> |          | $\vdash$ |   |
| _             | 43             | ₩      | $\vdash$   | $\vdash$     | ├  | <u> </u> | H        | <u> </u> | <u> — </u> | ├—   | {   |       | 93       | Н                | -            | <u> </u> | H        | <u> </u> | _        | $\vdash$ |          |   |
| _             | 44             | ₩      | -  | ├            | ⊢  | <u> </u> | $\vdash$ | <u> </u> | <u> </u>   | ├  |     |       | 94       | Н                | $\vdash$     | $\vdash$ | <u> </u> | <u> </u> | $\vdash$ |          | -        |   |
| 4             | 45             | +      | -  | <u> </u>     | <u> </u>   | L        | Ш        | Ь        | _          | ⊢  |     |       | 95       | Н                | <b> </b>     |          | Ш        | <u> </u> | $\vdash$ |          |          | _ |
| 4             | 46             | ╀      | <del> </del>                                     | $\vdash$     | <u> </u>   | _        | <u> </u> | $\vdash$ | <u> </u>   | <del> </del>                                     |     |       | 96       | Н                | 1            | Щ        | <u> </u> | $\vdash$ | $\vdash$ | _        |          |   |
| 4             | 47             | H      | ├-   | ├—           | -  | <u> </u> | <u> </u> | <u> </u> | <u> </u>   | $\vdash$   |     |       | 97       | $\sqcup$         | 1            | Ь.       | <u> </u> | <u> </u> | $\vdash$ | _        | Щ        |   |
| _             | 48             | H      | -  | <u> </u>     | <u> </u>   | _        | <u> </u> | <u> </u> | _          | <del>                                     </del> |     |       | 98       | Н                | ╀            | <u> </u> |          | <u> </u> | <u> </u> | $\vdash$ | Щ        | _ |
| -             | 49             | Ų.     | ⊢  | <u> </u>     | ├-   | _        | $\vdash$ | _        | _          | $\vdash$   |     |       | 99       | Ц                | ⊢            | <u> </u> |          | <u> </u> | $\vdash$ |          |          | _ |
|               | 50             | Ň      | L_   | L            | <u> </u>   | L        | L        | L        |            | <u> </u>   | 1   |       | 100      | N                |              |          | <u> </u> |          | <u></u>  | L        |          |   |
|               |                |        |  |              |  |          |          |          |            |  |     |       |          |                  |              |          |          |          |          |          |          |   |

| Cla      | aim                                    | Date      |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|----------|--|-----------|--|--|--------------|--------------|----------|----------|--|-----------------|--|--|--|--|--|
|          |  |           |  | $\sqcap$   |              |              |          |          |  |                 |  |  |  |  |  |
| Final    | Original                               | 20/9/2    |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 101                                    | N         | -  | -  |              |              |          | Н        |  | $\dashv$        |  |  |  |  |  |
|          | 102                                    | Ť         |  |  | -            | -            |          | _        |  | $\dashv$        |  |  |  |  |  |
|          | 103                                    | $\top$    | $\vdash$   | $\vdash$   |              |              |          | $\vdash$ |  | $\dashv$        |  |  |  |  |  |
|          | 104                                    | T         |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 105                                    |           |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 106                                    |           |  |  |              |              |          |          |  | $\Box$          |  |  |  |  |  |
|          | 107                                    | $\Box$    |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 108                                    | $\perp$   |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 109                                    | Ц         | _  |  |              |              |          |          |  | $\Box$          |  |  |  |  |  |
|          | 110                                    | Щ         | $oxed{oxed}$                                     | $ldsymbol{ldsymbol{ldsymbol{eta}}}$              |              | L            |          |          |  | _               |  |  |  |  |  |
|          | 111                                    | Ц         | ļ  | <u> </u>   |              |              |          |          |  | _               |  |  |  |  |  |
|          | 111<br>112<br>113                      | Щ         | $\vdash$   | <u> </u>   |              |              | <u> </u> |          | _  | Ш               |  |  |  |  |  |
|          | 113                                    | 4         | $\vdash$   | $\vdash$   |              |              |          | $\vdash$ | $\vdash$   | Ш               |  |  |  |  |  |
|          | 114                                    | Н         | <u> </u>   | ⊢  |              | _            |          |          |  | -               |  |  |  |  |  |
|          | 115<br>116                             | 뷰         | ├  | ⊢  |              | -            |          |          | <u> </u>   | $\vdash\vdash$  |  |  |  |  |  |
|          | 117                                    | N         |  |  | -            | -            |          | _        | $\vdash$   |                 |  |  |  |  |  |
|          | 110                                    | H         | ┝  | ┝  | Н            | H            |          | $\vdash$ | -  | $\dashv$        |  |  |  |  |  |
|          | 118<br>119                             | H         | ├  |  |              | -            | -        | -        |  | $\dashv$        |  |  |  |  |  |
|          | 120                                    | ╫╴        | ├  | ┢  | -            | ┝            | -        | -        | -  | $\dashv$        |  |  |  |  |  |
|          | 121                                    | H         | ┢  | ┢  | -            | <del> </del> |          |          | -  | $\dashv$        |  |  |  |  |  |
|          | 122                                    | Н         | $\vdash$   | ┢╌   | $\vdash$     | $\vdash$     |          |          | $\vdash$   | $\dashv$        |  |  |  |  |  |
|          | 123                                    | Н         | ┢  |  | $\vdash$     |              |          |          | _  |                 |  |  |  |  |  |
|          | 124                                    | Ħ         |  | 1  |              | -            |          | -        |  | _               |  |  |  |  |  |
|          | 120<br>121<br>122<br>123<br>124<br>125 | $\vdash$  | Г  | _  |              | $\vdash$     |          |          |  |                 |  |  |  |  |  |
|          | 126                                    | H         | <del>                                     </del> | Г  |              |              | $\vdash$ |          |  |                 |  |  |  |  |  |
|          | 126<br>127<br>128<br>129               | П         | Γ  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 128                                    | $\Box$    |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 129                                    | П         |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 130                                    | $\Box$    |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 131<br>132                             | Ш         |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 132                                    | Ш         | L  | <u> </u>   | <u> </u>     |              |          |          | _  |                 |  |  |  |  |  |
|          | 133                                    | Ш         | 匚  | _  | _            | _            | _        |          |  |                 |  |  |  |  |  |
|          | 134                                    | Ļ         | ļ  | ļ  |              |              |          |          | <u> </u>   | Щ               |  |  |  |  |  |
|          | 135                                    | 1         | _  | L  | _            |              |          |          | L.   |                 |  |  |  |  |  |
| -        | 136                                    | 0         | ┡  | $\vdash$   | _            | <u> </u>     |          | _        | $\vdash$   | $\dashv$        |  |  |  |  |  |
|          | 137<br>138                             | 0         | ├-   |  | H            | -            | -        | -        | $\vdash$   | $\vdash \vdash$ |  |  |  |  |  |
|          | 138                                    | 8         | ⊢  | 1  |              |              | -        | -        |  | $\vdash \vdash$ |  |  |  |  |  |
| L        | 140                                    | 7         | -  | -  | <del> </del> | -            |          |          | <del>                                     </del> | $\vdash\dashv$  |  |  |  |  |  |
|          | 141                                    | 6         | $\vdash$   |  | <u> </u>     | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$   | Н               |  |  |  |  |  |
| <b> </b> | 142                                    | N         | $\vdash$   | <del>                                     </del> | $\vdash$     |              | $\vdash$ |          |  | H               |  |  |  |  |  |
|          | 143                                    | 1         | $\vdash$   | $\vdash$   | Н            |              | $\vdash$ | Н        |  | Н               |  |  |  |  |  |
|          | 144                                    | $\top$    |  | T  | $\vdash$     |              |          |          | _  | H               |  |  |  |  |  |
|          | 145                                    | П         | Ι_   | Г  | _            |              |          |          |  | Н               |  |  |  |  |  |
|          | 146                                    |           |  |  |              |              |          |          | Г  | П               |  |  |  |  |  |
|          | 147                                    | $\Box$    |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 148                                    | П         |  |  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 149                                    | $\coprod$ | $\Box$   | 匚  |              |              |          |          |  |                 |  |  |  |  |  |
|          | 150                                    | N         |  | L.   |              |              |          |          |  |                 |  |  |  |  |  |

|         | ✓ Index of Claims (continued) |            |               |           |          |          |            |            |          |                 |            | Application/Control No. |            |          |                     |                   |          |          |          |              |          |          | Applicant(s)/Patent under |                     |              |                   |                     |              |                 |           |  |  |
|---------|-------------------------------|------------|---------------|-----------|----------|----------|------------|------------|----------|-----------------|------------|-------------------------|------------|----------|---------------------|-------------------|----------|----------|----------|--------------|----------|----------|---------------------------|---------------------|--------------|-------------------|---------------------|--------------|-----------------|-----------|--|--|
| يمه مهد | ın                            | aex        | ( 0           | 7 (       | , la     | ım       | S (        | CO         | nt       | ınu             | ea)<br>    | ,                       |            |          |                     |                   |          |          |          |              |          |          |                           |                     |              | Reexamination     |                     |              |                 |           |  |  |
|         |                               |            |               | Ш         |          |          | Ш          | Ш          |          |                 |            |                         |            |          |                     | 0/7               |          |          | <u>7</u> |              | _        |          |                           |                     | KUMAR ET AL. |                   |                     |              |                 |           |  |  |
|         |                               |            |               |           |          |          |            |            |          |                 |            |                         |            |          | E                   | xam               | nin      | er       |          |              |          |          |                           |                     | Art          | Uni               |                     |              |                 |           |  |  |
|         |                               |            |               |           |          |          |            |            |          |                 | l          |                         |            |          | $  _{\mathbf{J}_0}$ | essi              | ica      | ιТ       | Sti      | ultz         | ,        |          |                           |                     | 287          |                   |                     |              |                 |           |  |  |
|         |                               |            |               |           |          |          |            |            |          |                 |            |                         |            |          | 10.                 |                   | -        |          | <u> </u> | <u> </u>     | <u> </u> |          |                           |                     |              | -                 |                     |              |                 | -         |  |  |
|         |                               |            | ſ,            | _         |          |          |            |            |          | (               | Thre       | ouo                     | h n        | ume      | ral)                |                   | ſ        |          |          |              |          |          | ]                         |                     |              |                   |                     |              |                 |           |  |  |
|         |                               |            |               | Re        | ejec     | ted      |            |            | -        | `               | ,          | "   N                   |            |          | Non-Elect           |                   |          | ted      | ted      |              | Appeal   |          |                           |                     |              |                   |                     |              |                 |           |  |  |
|         |                               |            |               |           |          |          | 1          |            |          |                 |            | _                       | <u> </u>   |          |                     |                   |          |          |          |              |          |          |                           |                     | Objected     |                   |                     |              |                 |           |  |  |
|         |                               |            | =             | A         | llow     | ved      |            |            | ÷        |                 | Restricted |                         |            |          |                     |                   |          | 1        | Int      | erfe         | erer     | ıce      | l                         | 이                   | Objected     |                   |                     |              |                 |           |  |  |
|         |                               |            |               |           |          |          |            | ·-         |          |                 |            |                         |            |          |                     |                   |          |          |          |              | J        | _        |                           |                     |              |                   |                     |              |                 |           |  |  |
| :       | Cla                           |            |               |           |          | _Da      | <u>ite</u> | т-         |          | Claim           |            |                         | Date       |          | te                  |                   | 4        | CI       | aim      | Ļ.,          |          |          | Date                      |                     | - 7 -1       | Н                 |                     |              |                 |           |  |  |
|         | ai                            | Original   | 90,           |           |          |          |            |            |          |                 | -          | ┋╽                      | Original   |          |                     |                   |          |          |          |              |          | <u>-</u> | na                        |                     |              |                   |                     |              |                 |           |  |  |
|         | Final                         | Orig       | 20/9/2        |           |          |          |            |            |          |                 | Gei        | [                       | ۲ig        |          |                     |                   |          |          |          |              |          | Final    | Original                  |                     |              |                   |                     |              |                 | 1         |  |  |
|         |                               | 151        | Ļ             | $\dashv$  |          | -        | +          | ┼          |          | Н               | -          |                         |            |          | $\perp$             |                   | 4        | 4        |          | $\bot$       | 4        |          |                           | $\square$           | _            | $\perp$           |                     | _            | $\perp$         | Ш         |  |  |
|         |                               | 152        |               | $\dashv$  | $\dashv$ | +        | +          | +          |          | H               | $\vdash$   |                         | 201        |          | +                   | $\vdash$          | $\dashv$ | $\dashv$ | +        | ╁            | -        |          | 251<br>252                | $\vdash$            |              | ╁┈                | Н                   | $\dashv$     | +               | Н         |  |  |
|         |                               | 153        |               |           | 士        |          | 土          | 上          |          |                 |            | _ [                     | 203        |          |                     |                   |          |          | 1        |              | 1        |          | 253                       |                     | $\top$       |                   | $\Box$              | 寸            |                 |           |  |  |
|         |                               | 154        | Ш             | $\dashv$  | _ -      |          | $\bot$     | 4          |          | Щ               | _          |                         | 204        | $\perp$  | ļ                   |                   | 4        |          |          | $\bot$       | 4        |          | 254                       | $\sqcup$            | $\perp$      | $\perp$           |                     | $\Box$       |                 |           |  |  |
|         |                               | 155<br>156 |               | $\dashv$  | $\dashv$ | +        | +          | ┼┈         | -        | $\mathbb{H}$    | -          |                         | 205        | +        | +                   | $\vdash$          | $\dashv$ |          | +        | ╁            | +        |          | 255<br>256                | $\vdash$            |              | +                 | $\vdash$            | $\dashv$     |                 | $\vdash$  |  |  |
|         |                               | 157        | 1             |           |          | $\top$   | +          | †          |          | H               | -          |                         | 207        | +        | $\vdash$            | $\vdash$          | ┪        | 十        | +        | ╁            | 1        |          | 257                       | H                   | +            | $\top$            | $\vdash$            | $\dashv$     |                 | $\vdash$  |  |  |
|         |                               | 158        | Ш             |           |          |          | Į          | L          |          |                 |            |                         | 208        |          |                     |                   | $\Box$   |          |          | 工            | ]        |          | 258                       |                     |              |                   |                     | 1            |                 |           |  |  |
|         |                               | 159<br>160 | Н             | $\dashv$  | +        | +        | +          | ₩          |          | Н               | -          |                         | 209<br>210 | +        | +                   | $\vdash$          | $\dashv$ | $\dashv$ | +        | ╀            | -        |          | 259<br>260                |                     |              | +                 | $\vdash$            | -            | $\dashv$        | Н         |  |  |
|         |                               | 161        | 1             |           | $\dashv$ | +        | 十          | +-         | -        | Н               |            |                         | 211        | $\dashv$ | +-                  | $\vdash$          | 7        | $\dashv$ | +        | +            | 1        |          | 261                       | $\vdash$            | -            | +                 | -                   | +            | $\dashv \dashv$ | H         |  |  |
|         |                               | 162        |               |           | 1        | $\perp$  | 工          | $\perp$    |          |                 |            | 2                       | 12         |          |                     |                   |          |          |          | 工            |          |          | 262                       | Ш                   |              |                   |                     |              |                 | 口         |  |  |
|         |                               | 163<br>164 | 7             | $\dashv$  |          | +        | +          | +          |          | Н               | -          |                         | 213        | -        | $\perp$             |                   | $\dashv$ | $\dashv$ |          | +            | 4        |          | 263<br>264                | $\sqcup$            | +            | $\vdash$          | $\dashv$            | 4            |                 | Ы         |  |  |
|         |                               | 165        |               | $\dashv$  | $\dashv$ | $\dashv$ | +          | +          |          | H               | $\vdash$   |                         | 215        | +-       | +                   | $\vdash$          | $\dashv$ | $\dashv$ | +        | ╁            | ┪        | _        | 265                       | $\vdash$            | +            | +                 | $\vdash$            | ┪            |                 | H         |  |  |
|         |                               | 166        | 0             |           |          |          | 丄          | 上          |          |                 |            | 12                      | 216        |          |                     |                   | ╛        |          |          |              | ]        |          | 266                       |                     |              |                   |                     |              |                 |           |  |  |
|         | _                             | 167<br>168 |               |           | $\dashv$ | - -      | ┿          | +          | _        | $\square$       | <u> </u>   |                         | 217        |          | ┼                   | $\vdash \vdash$   | 4        | -        | +        | +            | 4        |          | 267<br>268                | $\sqcup$            | +            | $\perp$           | $\sqcup$            | $\dashv$     |                 |           |  |  |
|         |                               | 169        |               | -         | $\dashv$ | +        | +          | +          | H        | Н               | -          |                         | 218<br>219 | +        | $\vdash$            | $\vdash$          | -        | $\dashv$ | +        | ╁            | 1        | _        | 269                       | $\vdash$            | +            | $\vdash$          | $\vdash$            | +            |                 | H         |  |  |
|         |                               | 170        | 0             |           |          |          | 土          | 上          |          |                 |            | 1                       | 220        |          |                     |                   |          |          |          | 土            | 1        |          | 270                       |                     |              |                   |                     |              |                 |           |  |  |
|         |                               | 171<br>172 | 9             | $\dashv$  | _ -      | - -      | +          | ╄          |          |                 | <u> </u>   | -   2                   | 221        | +        | -                   | -                 | 4        | -        | +        | +            | 4        | ļ        | 271                       | $\sqcup$            | _            | $\sqcup$          | $\sqcup$            | 4            |                 | Щ         |  |  |
|         |                               | 173        |               | $\dashv$  | +        | ╅        | +-         | ╁╌         | -        | Н               | $\vdash$   |                         | 223        | +        | +-                  |                   | $\dashv$ | $\dashv$ | +        | ╁            | ┪        |          | 272<br>273                | H                   | +            | +                 | $\vdash$            | +            |                 | H         |  |  |
|         |                               | 174        | 0             |           |          |          |            | 工          |          |                 |            | 12                      | 24         |          |                     |                   |          |          |          | 土            | j        |          | 274                       |                     |              |                   |                     | 1            |                 |           |  |  |
|         |                               | 175        |               |           | $\perp$  | $\perp$  | $\bot$     | lacksquare | _        | Щ               | <u> </u>   |                         | 25         |          | 1                   |                   | 4        |          | 1        | $\perp$      | -        |          | 275                       | Ш                   |              | 1                 | $\Box$              | 4            |                 |           |  |  |
|         |                               | 176<br>177 |               | $\dashv$  |          | +        | +          | +          |          | H               | -          |                         | 26<br>27   | +        | +                   | $\vdash$          | $\dashv$ |          | +        | +            | ┨        |          | 276<br>277                | $\vdash$            |              | +-                | $\vdash$            |              | $\dashv$        | H         |  |  |
|         |                               | 178        | N             |           |          | 工        | 上          |            |          |                 |            | 2                       | 28         |          | $\Box$              |                   | $\Box$   | T        |          |              | _        |          | 278                       |                     |              |                   |                     | ╛            |                 |           |  |  |
|         |                               | 179        |               | _         | 1        | $\perp$  | 4          | ┼          | L        |                 | $\vdash$   |                         | 29         | $\perp$  | $\perp$             | $\sqcup$          | $\dashv$ | 4        | 4        | 4            | 4        | <u> </u> | 279                       | Ш                   |              | $\perp$           |                     | 4            |                 |           |  |  |
|         |                               | 180<br>181 | Н             | -         |          | +        | +          | +          |          | -               | -          |                         | 30         | +        | +                   | -                 | $\dashv$ | $\dashv$ | +        | ╁            | -        | -        | 280<br>281                | $\vdash$            |              | $\vdash$          | -                   | +            | $\dashv$        | Н         |  |  |
|         |                               | 182        |               | 二         | 士        |          | 土          |            |          |                 |            | - 2                     | 32         |          |                     |                   |          |          |          |              |          |          | 282                       |                     |              |                   |                     |              |                 |           |  |  |
|         |                               | 183        | Ш             | _         | 4        | _        | 4          | ↓_         |          | Щ               | $\perp$    |                         | 33         | $\perp$  | $\perp$             | $\sqcup$          | $\dashv$ | 4        | $\perp$  | $\bot$       | 4        |          | 283                       | Ш                   | $\bot$       | $\perp$           |                     | _            |                 | Ш         |  |  |
|         |                               | 184<br>185 | $\mathcal{H}$ |           | +        | +        | +          | ┼          | $\vdash$ | -               | -          |                         | 34         | +        | +                   | -                 | $\dashv$ | $\dashv$ | +        | ╁            | -        |          | 284<br>285                | H                   | +            | +                 | $\dashv$            | $\dashv$     |                 | Н         |  |  |
|         |                               | 186        | 1             |           | $\top$   |          | 1          | $\perp$    |          |                 |            |                         | 36         | +        |                     |                   |          |          | 1        | †            | 1        |          | 286                       | H                   | $\top$       | H                 |                     | $\dashv$     | - -             | H         |  |  |
|         |                               | 187        | I             |           |          | Ţ        | $\bot$     |            |          |                 |            |                         | 37         | 1        |                     | Ц                 | $\Box$   | $\Box$   | $\perp$  | $\perp$      |          |          | 287                       |                     |              | $\perp$           |                     |              |                 |           |  |  |
|         |                               | 188<br>189 | Н             |           | +        | +        | +          | ╁          |          | $\vdash$        | -          |                         | 38         | +        | $\vdash$            | $\vdash$          | $\dashv$ | -        | +        | +            | -        |          | 288<br>289                | $\vdash$            | _            | +                 | $\dashv$            | $\dashv$     | +               | Н         |  |  |
|         |                               | 190        |               | _†        | 士        | $\pm$    | +          | T          |          | $\Box$          | -          |                         | 40         | $\perp$  | $\coprod$           | $\vdash \uparrow$ | +        | $\dashv$ |          | +            | 1        |          | 290                       | $\vdash \vdash$     | +            | $\dagger \exists$ | $\vdash \vdash$     | $\dashv$     | +               | Н         |  |  |
|         |                               | 191        |               | $\exists$ | T        | T        | I          | $\Box$     |          |                 |            | 2                       | 41         |          | П                   | I                 | 1        | $\Box$   |          | I            | ]        |          | 291                       |                     | $\perp$      | $\Box$            |                     |              |                 | $\square$ |  |  |
|         |                               | 192<br>193 |               | -         |          | _        | +          | +          | <u> </u> | H               | -          |                         | 42         | +        | $\vdash$            |                   | +        | +        |          | +            | -        |          | 292<br>293                | $\vdash \downarrow$ | +            | +                 | $\vdash \downarrow$ | 4            | $\dashv$        | $\dashv$  |  |  |
|         |                               | 194        |               | _         | +        | +        | +          | +          | -        | $\vdash$        | $\vdash$   |                         | 44         | +        | +                   | $\dashv$          | $\dashv$ | $\dashv$ | +        | +            | ┨        |          | 293                       | $\vdash$            | +            | +                 | $\vdash$            | $\dashv$     | -               | Н         |  |  |
|         |                               | 195        |               | $\Box$    |          | $\bot$   | Ţ          | $\Box$     |          |                 |            | 72                      | 45         | $\bot$   | $\Box$              |                   | コ        | $\Box$   | $\bot$   | $\downarrow$ | ]        |          | 295                       | $\square$           |              |                   |                     |              |                 |           |  |  |
|         |                               | 196<br>197 | $\vdash$      | -         |          | -        | +          | +          | H        | $\vdash \vdash$ | -          |                         | 46         | -        | $\vdash$            | $\vdash \vdash$   | 4        | 4        | +        | +            | 4        | ļ        | 296<br>297                | $\vdash$            | -            | $\vdash$          |                     | $\downarrow$ |                 | Н         |  |  |
|         |                               | 198        | $\vdash$      | $\dashv$  | +        | +        | +          | +          | -        | H               | $\vdash$   |                         | 47         | +        | +                   | $\vdash$          | $\dashv$ | +        | +        | +            | ┨        |          | 298                       | $\vdash \vdash$     | +            | $\vdash$          | $\dashv$            | $\dashv$     |                 | Н         |  |  |
|         |                               | 199        |               |           | 工        |          | 工          | I          |          |                 |            | 72                      | 49         |          |                     | 口                 | $\bot$   |          | 士        | I            | ן ו      |          | 299                       |                     | 士            |                   |                     | 寸            |                 |           |  |  |
|         |                               | 200        |               |           |          |          |            |            |          |                 | L          |                         | 50         |          |                     |                   | $\perp$  | $\Box$   | $\perp$  |              |          | L        | 300                       | Ш                   | _[_          |                   |                     |              |                 |           |  |  |